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13. ABSTRACT (Maximum 200 Words)

The UAB Clinical Trial Network was aimed at forming a collaborative linkage between the UAB Comprehensive Cancer Center, community-based oncology practices and pharmaceutical sponsors, in order to provide access to high priority novel clinical trials to women with breast cancer within the community. Year 03 was dedicated to review of the Network activity by both the internal and external advisory board, which recommended modification of Network administrative and regulatory oversight activity. A thorough reorientation and re-training of the research department at Georgia Cancer Specialists (GCS) was performed as part of a Corrective Action Plan following protocol adherence and compliance deficiencies noted during an FDA audit of a non-Network protocol. As a result, initiation of all new trials and patient accrual was voluntarily halted at GCS for 6 months, and then restarted in 2003 following successful passage of both an internal as well as external audit.

Four Network breast cancer clinical trials active in Y02 completed accrual and have been closed. Total accrual from the Network sites was 49 for these trials. Following restart of patient accrual at GCS, two Network breast cancer trials were re-initiated and have accrued a total of 18 patients to date. Additional trials await initiation.

Two clinical sites in Alabama have been added to our Network and activation of breast cancer trials at these sites is planned. We have received approval for a no-cost extension of funding into Year 04.

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Introduction

In 2000 we initiated a Clinical Trials Network linking the University of Alabama Comprehensive Cancer Center with community based oncology groups for the purpose of conducting high priority breast cancer clinical trials at the community level. The intent was to provide breast cancer patients in the community access to novel reagents, assist the community groups by providing efficient clinical trial management support, and in turn increasing accrual to Cancer Center supported clinical trials.

The Network currently consists of linkage to a 20-Clinic Hematology-Oncology Group Practice in metropolitan Atlanta (Georgia Cancer Specialists - GCS) and two recently initiated sites in Alabama (Birmingham Hematology-Oncology and Montgomery Cancer Center). Breast cancer clinical trials have been active to date only at the GCS site, with patient accrual at the new sites slated for 3rd quarter 2003.

A voluntary moratorium on new trial and new patient accrual was instituted at the GCS Network site from May 2002 till November 2002 in order to re-train and re-orient the research department staff following deficiencies in clinical trial conduct identified during an FDA audit of a non-Network clinical trial. Following a thorough Corrective Action Plan during this voluntary moratorium, GCS successfully passed both an internal and external QA/QC audit and accruals were re-initiated in November 2002.

Currently two breast cancer Network trials are active at the GCS site with a total accrual of 22 patients in the past 6 months. Additional initiations at the GCS and Alabama sites are planned.

A no-cost extension of the current funding has been approved to continue Network activity into 2004.

Body

Key Research Accomplishments:

1. Task 16

Review and analysis of Y01-02 activity

- The Internal Advisory Committee of the Cancer Center reviewed the accomplishment of the Network. An organizational restructuring was recommended to better improve communication and coordination of patient accrual at the Network site. The Network coordinator research nurse function was transferred to a research RN at the Network site.
- The Internal Advisory Committee also reviewed the current accomplishment of the Network as well as the Corrective Action Plan instituted by GCS to ensure GCP and protocol compliance, and was satisfied with the efforts and diligence of the Network partners to correct past deficiencies and put into place quality assurance/quality control (QA/QC) measures to ensure compliance.

- The Network concept was also presented to the External Advisory Committee of the Cancer Center, which reviewed the findings and deficiencies identified by the FDA on a non-Network protocol as well as the oversight responsibility and burden assumed by UAB for compliance and study adherence by GCS research. The Advisory Committee was of the opinion that UAB Cancer Center's research program could potentially be held accountable for protocol violation and non-compliance on part of the Network site, especially if a UAB PI was overall responsible for patient accrual and oversight. The Advisory Committee provided recommendations regarding safeguarding the Cancer Center's research program from liability and FDA sanctions.
- A recommendation that the Network assume independent IRB through a central IRB and that a Network PI be identified to assume responsibility for patient management enrolled at the Network site was proposed.
- Based upon the recommendations of the Internal and External Advisory Committee, a restructuring of the regulatory and budgetary oversight of the Network sites was proposed in order to avoid spill-over of liability to the Cancer Center. Furthermore it was decided that all Network sites would have an onsite PI, who would oversee the trial and be responsible for study management and oversight.

2. Task 17 – Month 30 Completion of Trials Initiated in Year 02

- Following delay of orderly activation of clinical trials at Network site in Year 01, one phase I, two phase II and three phase III trials were activate in year 02 with a total accrual of 49 patients.
- By month 30, one phase I (UAB 0009), two phase II (UAB 9912 and UAB 0152) and one phase III (UAB 0028) clinical trials had achieved their targeted patient accrual and were closed. The total accrual for each trial is provided below.
- The voluntary accrual moratorium imposed by GCS to accomplish their re-training and re-orientation program (following FDA audit of a non-Network trial) resulted in a significant impediment and halting of clinical trials for over 6 months (months 21 28) Upon restarting of patient accrual in November 2003 (month 29), two of the phase III trials still accruing patients were re-initiated and patient accrual was restarted. As a result of the events patient accrual has undergone a substantial decrement during year 03 and did not meet the projected goals of the original proposal.
- As part of the re-orientation, the entire research department including investigators, research RNs, data managers and support staff underwent IRB recertification via UAB as well as via the NCI sponsored on-line program

• The entire research department including investigators, research RNs, data managers and support staff also underwent recertification in clinical trail processes through a certified external agency

3. Task 18 – Month 25–36 Initiation of phase I clinical trials

- Given the complexity of phase I clinical trials using novel agents and frequent need for in-patient monitoring, and rigorous pharmacokinetic sampling, it has not been possible to accomplish the previously planned activation of phase I breast cancer protocols at the Network sites. Such trials are often carried out at NIH-funded General Clinical Research Centers and thus was not readily feasible in the community.
- Most of the breast cancer phase I trials at UAB have been multi-center trials with 3 patients per cohort (max. 6 at MTD). Given the complexity of coordinating accrual at multiple sites for a restricted number of patients per dose level, the Network sites have not generally been included in these trials. Single center phase I/II trials initiated at UAB would be ideally suited for the Network and are being planned.

4. Task 19 – Month 30 36 Initiation of phase II clinical trials

- A number of phase II clinical trials are to be initiated and implemented in the second quarter of 2003 and will thus be conducted during the no-cost extension period of this grant. The community has a vast population of women requiring adjunctive chemotherapy for breast cancer, yet no trial fitting this patient population is available outside the cooperative group setting. A study to evaluate dose dense chemotherapy in the adjuvant setting is being awaited for Network activation.
- The following new breast cancer clinical trials are projected to be activated at the Network site in year 04 during the no-cost extension of the current funding period.
 - Phase II trial of novel aromatase inhibitor in the treatment of hormone responsive first line Metastatic breast cancer
 - Phase II trial of a novel dual Her1/Her2 tyrosine-kinase inhibitor for the treatment of Her2 negative patients with Metastatic breast cancer following failure of more than one prior therapy
 - Proposed randomized phase II study comparing QOL with Cytoxan / Doxil versus Cytoxan / Adriamycin as adjuvant therapy in node negative high risk breast cancer
 - Proposed phase III trial of adjuvant dose dense chemotherapy for Her2 women with node positive breast cancer

- Funding mechanism for Network trials
 - It is clear that the Network concept has been difficult to initiate, and following a period of orderly progress, suffered a setback due to deficiencies in compliance and protocol adherence (in a non-Network trial). The process has provided practical insights into the complexities in the conduct of clinical trials in the setting of a busy and productive community practice. The Network partners have responded very effectively to the need to improve, retrain and re-orient the research department and are committed to quality clinical research. Funding mechanisms through pharmaceutical sponsors as well as peer-reviewed mechanisms to build upon the current established reorganized clinical trials operation will be pursued during this no-cost funding period.

UAB-Community Breast Cancer Clinical Trials Network

Active Protocol	Patient Accrual – Year 03
UAB 0047 – A Multicenter	14
Phase III Randomized Trial	14
Comparing Docetaxel in	
Combination with	
Doxorubicin and	
Cyclophosphamide (TAC)	
Versus Doxorubicin and	
Cyclophosphamide	
Followed by Docetaxel (AC	
→ T) as Adjuvant	
Treatment of Operable	
Breast Cancer HER2NEU	
Negative Patients with	
Positive Axillary Lymph	
Nodes (BCIRG 005)	
UAB 0106 – A Multicenter	8
Phase Ill Randomized Trial	·
Comparing Doxorubicin	
and Cyclophosphamide	
Followed by Docetaxel	·
(AC→T) With Doxorubicin	
and Cyclophosphamide	
Followed by Docetaxel and	
Trastuzumab (AC→TH)	
and With Docetaxel,	
Platinum Salt and	
Trastuzumab (TCH) in the	
Adjuvant Treatment of	

Active Protocol	Patient Accrual – Year 03
Node Positive and High	
Risk Node Negative	
Patients with Operable	
Breast Cancer Containing	
the Her2Neu Alteration	
(BCIRG 006)	

Closed Protocols	Total Network
	Accrual
UAB 9912 – A Phase II	17
Study Using SGN-15	
(cBR96-Doxorubicin	
Immunoconjugate) in	
Combination with Taxotere	
for the Treatment of	
Metastatic or Recurrent	
Breast Carcinoma	
UAB 0009 – A Phase I	4
Clinical and	
Pharmacokinetic Evaluation	
of Oral CI-1033 Given as a	
Single Dose Daily in	
Patients with Advanced	
Nonhematologic	
Malignancies	
UAB 0028 – A Multicenter,	12
Open-Label, Phase III,	
Randomized, Active-	
Controlled Trial Evaluating	
the Efficacy, Safety, and	,
Pharmacokinetics of	
rhuMAb VEGF	
(BEVACIZUMAB), in	
Combination with	
Capecitabine	
Chemotherapy, in Subjects	
with Previously Treated	
Metastatic Breast Cancer	
UAB 0152 – A Multicenter	6
Phase 2 Study of CI-1040	
in Patients with Advanced	· -
Non-Small Cell Lung	
Cancer, Breast Cancer,	
Colon Cancer, or Pancreatic	
Cancer	

Reportable Outcomes

• Presentations at ASCO 2003

- Hart LL, Nabell L, Saleh M, Sundaram S, Mauer A, Marshall J, McCune D, Sandler AS, Sing AP, Siegall C: A phase II study of SGN-15 (cBR96-doxorubicin Immunoconjugate) combined with docetaxel for the treatment of metastatic breast carcinoma. American Society of Clinical Oncology 38th Annual Meeting, May 31-June 3, 2003
- Saleh MN, Irwin D, Burton G, Hargis JB, Chitambar C, Jones CM, Shapiro CL, Holmlund JT, Dorr A: Phase 2 trial of ISIS 2503, an antisense inhibitor of h-ras, in combination with weekly paclitaxel in the treatment of patients with metastatic breast cancer. American Society of Clinical Oncology 38th Annual Meeting, May 31-June 3, 2003

Conclusion

The UAB Clinical Trials Network was established as a unique setup for the conduct of early phase I/II and phase III trials using novel agents in the community setting. While the patient base to support such an endeavor exists and patients in the community are very willing to participate in clinical trials, the experience of the past year has provided a measure of realism and revealed some of the difficulties encountered in operating a clinical trials network between a highly academic Cancer Center and a busy community based oncology practice.

The experience has been very insightful and the lessons learned have prepared us to revisit the goals and expectation of such a network affiliation as well as the need for more "hand-holding" if such an enterprise is to succeed and high quality cutting edge clinical research is to be conducted in the community setting.

While the goals and objectives proposed are achievable it is fair to say that the "return of investment" in terms of patient accrual and quality protocol compliance and adherence to GCP dictates that a slower start up pace and gradual incremental achievement should be aimed for.

References

N/A

Appendices

Attachment 1:

Georgia Cancer Specialists – Final Progress Report Submitted to the FDA, November 27, 2002

Attachment 2: Abstracts presented at ASCO 2003

Georgia Cancer Specialists Final Progress Report November 27, 2002

Area for Improvement	ڻ 	Corrective Action	Timeline/ Documentation	Status	Compliance Measure
Protocol-specific education and compliance	•	Each protocol will be assigned a Lead	Lead CRC assigned for each protocol Protocol-specific re-orientation and training	Complete	Quarterly Process Audit
		He/she will be the go-to person for issues	occurred as follows:		(Process Audit
		relating to this trial. They will also be	1. BCIRG 005: 5/15/02 2. BCIRG 006: 5/15 02		SOP states that the Regulatory
		sponsor and sharing information with the	3. ISIS 2503CS10: 5/29/02		Department will
		department.	4. Pfizer CI 1040: 5/8/02		be responsible
	•	The five protocols with the highest	5. Pfizer CI 1033: 5/8/02		tor audit)
		accrual/accrual potential will be reviewed	• FDA Form 483 from audit of Genentech AV2107G		
		by all staff.	reviewed, corrective Action Plan outlined and		
	•	The results of the FDA audit will be	implementation timeline discussed. Follow-up		
-		reviewed by all research staff.	compliance audits discussed and approved.		
	•	All research staff to be inserviced on new	 Following new protocols were initiated 		
		protocols	1. Genta GL303 for CLL		
	•	Prior to re-starting accrual staff will	2. Genta GN304 for NSCLC		
		undergo abbreviated re-orientation	Genta GL212 for Mantle Cell Lymphoma		
Organizational structure	•	Patient Oriented Clinical Research is	New organizational structure approved by the board	Complete	N/A
(PI oversight)		accorded divisional status within GCS with	2/02		
		direct reporting to the Executive	 Research Nurse Manager position filled 8/26/02. 		
		Management. Dr. Saleh is the Medical			
		Director and sits on the board as an ex-			
		officio member. This provides Dr. Saleh			
		the ability to initiate new policies and			
		procedures with the authority of the board.			

• • •	Area Ior Improvement	<u>ರ</u>	Corrective Action	Ti.	Timeline/ Documentation	Status	Compliance Measure
Manager (Mary Jane Wadd the CRCs, Data Managers, and regulatory personnel al Saleh. • All research staff, PI, site so representatives from the Clb Division of GCS attend we where all patients on trial a Amendments, audit reports issues, corrective actions, a and procedures are reviewe meeting. This meeting prov of the research program. • Meeting minutes are kept, with due dates are commun reviewed at each subsequer ensure compliance. • The Director of Research Committee, Business Oper Committee, and EVP Committees and			The Director of Research Operations (James Gilmore, PharmD), the Research Nurse				
All research staff, PI, site sa representatives from the Cladinision of GCS attend we where all patients on trial and Amendments, audit reports issues, corrective actions, a and procedures are reviewed meeting. This meeting provo of the research program. Meeting minutes are kept, with due dates are communitieviewed at each subsequenensure compliance. The Director of Research Committee, Business Oper Committee, Business Oper Committee, and EVP Committee, and EVP Committee, and EVP Committee, and EVP Committees and EVP Committ			Manager (Mary Jane Waddell, RN, BSN),				
All research staff, Pl, site so representatives from the ClD Division of GCS attend wee where all patients on trial a Amendments, audit reports issues, corrective actions, a and procedures are reviewe meeting. This meeting prov of the research program. Meeting minutes are kept, with due dates are commun reviewed at each subsequer ensure compliance. The Director of Research Committee, Business Oper Committee, Business Oper Committee, and EVP Committees, and E			gulatory personnel al				
Division of GCS attend we where all patients on trial a Amendments, audit reports issues, corrective actions, a and procedures are reviewe meeting. This meeting prov of the research program. Meeting minutes are kept, with due dates are commun reviewed at each subsequer ensure compliance. The Director of Research Committee, Business Oper Committee, Business Oper Committee, and EVP Committees, and EVP Committees and EVP Committees. Nurse Manager a system-wide Nurse Manager a system-wide Nurse Manager all protocol initiations will all research staff, PI and site. Each protocol has a lead of the contract of the cont	Communication	•	All research staff, PI, site sub-PIs, and	•	Weekly Research Departmental meetings every	Complete	Quarterly
Division of GCS attend wee where all patients on trial a Amendments, audit reports issues, corrective actions, a and procedures are reviewe meeting. This meeting prov of the research program. • Meeting minutes are kept, with due dates are commun reviewed at each subsequer ensure compliance. • The Director of Research Committee, Business Oper Committee, Business Oper Committee, and EVP Commrepresenting the Research I Research Nurse Manager a system-wide Nurse Manager a system-wide Nurse Manager all protocol initiations will all research staff, PI and site and an each protocol has a lead of the contract of the cont			representatives from the Clinical Operations		Wednesday began 4/02. Meeting minutes are		Process Audit
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issues, corrective actions, a and procedures are reviewe meeting. This meeting prov of the research program. • Meeting minutes are kept, a with due dates are commun reviewed at each subsequer ensure compliance. • The Director of Research C attends monthly Clinical O Committee, Business Oper Committee, and EVP Commrepresenting the Research I Research Nurse Manager a system-wide Nurse Manager a system-wide Nurse Manager all protocol initiation S all research staff, PI and site and each protocol has a lead of the contains of the contains and site of the contains of the			Amendments, audit reports, compliance	•	In addition to our general weekly meeting, each		
and procedures are reviewe meeting. This meeting prov of the research program. • Meeting minutes are kept, with due dates are commun reviewed at each subsequer ensure compliance. • The Director of Research C attends monthly Clinical O Committee, Business Oper Committee, and EVP Comrepresenting the Research I Research I was expresenting the Research I epresenting the Research I epresenting the Research I epresenting the Research I all protocol initiation S all protocol initiations will all research staff, PI and site Each protocol has a lead of the staff of			issues, corrective actions, and new policies		clinic has a clinic-specific meeting run by the site		
Meeting. This meeting prov of the research program. Meeting minutes are kept, with due dates are commun reviewed at each subsequer ensure compliance. The Director of Research Cattends monthly Clinical O Committee, Business Oper Committee, and EVP Comrepresenting the Research I Research Nurse Manager a system-wide Nurse Manager a system-wide Nurse Manager a lept GCS Study Initiation S all protocol initiations will all research staff, PI and signal and sig			and procedures are reviewed during this		sub-PI. These meetings include clinic staff and		
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with due dates are commun reviewed at each subsequer ensure compliance. The Director of Research C attends monthly Clinical O Committee, Business Oper Committee, and EVP Comrepresenting the Research I Research Nurse Manager a system-wide Nurse Manager as system-wide Nurse Manager and I protocol initiations will all research staff, PI and side Each protocol has a lead of the date of the dat			of the research program.		resolve any clinic-specific issues. Minutes for these		
with due dates are commun reviewed at each subsequer ensure compliance. The Director of Research C attends monthly Clinical O Committee, Business Oper Committee, and EVP Comrepresenting the Research I Research Nurse Manager a system-wide Nurse Manager per GCS Study Initiation S all protocol initiations will all research staff, PI and site and protocol has a lead of the staff of		•	Meeting minutes are kept, Action Items		meetings are also kept and available on the		
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The Director of Research C attends monthly Clinical O Committee, Business Oper Committee, and EVP Comrepresenting the Research I Research Nurse Manager a system-wide Nurse Manage representing the Research I Per GCS Study Initiation S all protocol initiations will all research staff, PI and site Each protocol has a lead of the staff of t			ensure compliance.		Ongoing protocol and GCS education occurs at this		
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Committee, and EVP Comrepresenting the Research I Research Nurse Manager a system-wide Nurse Manage representing the Research I Per GCS Study Initiation S all protocol initiations will all research staff, PI and signal in the staff of the staff th			Committee, Business Operations		is formulated in response to sponsor's monitoring		
Research Nurse Manager a system-wide Nurse Manage representing the Research I en GCS Study Initiation S all protocol initiations will all research staff, PI and side the collection of the staff of o			Committee, and EVP Committee meetings		report		
Research Nurse Manager a system-wide Nurse Manage representing the Research I Per GCS Study Initiation S all protocol initiations will all research staff, PI and side the protocol has a lead of the staff			representing the Research Department.				
system-wide Nurse Manage representing the Research! Per GCS Study Initiation S all protocol initiations will all research staff, PI and sit a		•	Research Nurse Manager attends monthly				
Per GCS Study Initiation S all protocol initiations will all research staff, PI and sit Each protocol has a lead of the staff.			system-wide Nurse Manager Meeting				
all protocol initiations will all research staff, PI and side Each protocol has a lead of	Protocol initiation	<u> </u>	Per GCS Study Initiation SOP attendance at	1.	Study Initiation SOP	Complete	Quarterly
all research staff, PI and si Each protocol has a lead cl	attendance		all protocol initiations will be mandatory for	•	Since June 2002, 3 new trials have been initiated in		Process Audit
			all research staff, PI and site sub-PIs		compliance with our SOP. A lead CRC has been		
and and and the state of the st		•			identified for each new protocol and a follow-up		
COOLUMAIOF IDENILIED AS UIE SINUY ICSOUNCE.			coordinator identified as the study resource.		inservice with research staff has been conducted.		
Patient eligibility • PI or site sub-PI and CRC must review all	Patient eligibility	•		•	Screening Visit SOP	Complete	Monthly
confirmation and source documentation related to eligibility	confirmation and		source documentation related to eligibility	•	Policy has been implemented and is being closely		Internal Audit

Corrective Action
and sign engiounty enecklist prior to patient enrollment. This documentation, including documentation of sponsor-granted exceptions, must be on hand prior to enrollment. All patients evaluated for protocol will undergo a "protocol specific clinic visit" by PI or sub-PI as formal component of eligibility screening to insure eligibility compliance
The PI (or site sub PI) will evaluate all new protocol patients prior to enrollment and at each of the study-specified visits. Patient consent will be obtained by the PI or site-sub PI in the presence of the research coordinator prior to enrollment onto study. This will be documented in both MD and CRC note All source documents necessary to document eligibility have to be on hand in order for the patient to be registered / enrolled and the eligibility check list has to be signed by PI or site sub PI and research
All radiographic measurements will comply with protocol specifications. Central radiology review with Decatur Health Imaging. Each narrated radiology report will be accompanied by documentation of the bidimensional measurements of the identified index lesions and comparison to baseline. If this requirement is not met, the PI will assume responsibility for radiologic review

Area for	Co	Corrective Action	Timeline/	Status	Compliance
Improvement			Documentation		Measure
		and reporting.			
Source Documentation	•	All protocol required clinic visit notes will be dictated as STAT Research Note or	 Source Documentation Policy and Procedure Research Source Document Form Policy and 	Complete	Monthly Internal Audit
		electronically entered by investigator within	Procedure		
		24 hours of patient visit, transcribed within			
		24-48 hours and physically signed and dated by the PI or site-sub PI.			
	•	All nursing pre-treatment assessments will			
		be performed by research coordinators. These notes will be dated and signed to			
		denote authorship.			
	•	Documentation of chemotherapy and/or			
		study drug administration and related events			
		will be performed by the respective clinic			
		nurse with date and signature to denote			
		authorship.			
-	•	The entire documentation of each patient			
		encounter during study specific visits will			
		be reviewed by the research coordinator to			
		ensure compliance with source			
		documentation requirements.			
	•	If correction or changes to a patient note is			
		required, a new Addendum Note must be			
		changes are to be made to the original note.			
	•	Implementation of a new Research Source			
		Documentation Form to be used for all			
		research patients. This form will follow the			
		patients through each stop during their			
		treatment visits capturing all relevant			
		information (AEs, labs, dose modifications,			
		etc.) on one form. This will enhance			
		protocol compliance and provide one			
		uniform source document for each patient			

Compliance Measure		Monthly Internal Audit	Quarterly Process Audit	Tiocoo Tinan		Monthly	Internal Augur	Quarterly	Process Audit													Quarterly Process Audit	
Status		Complete				Complete																Complete	
Timeline/ Documentation		Adverse Event and Serious Adverse Event Reporting Policy and Procedure.				Research Drug Accountability and Dispensing	Policy and Procedure • Day of Treatment Verification of Standard	Chemotherapy Orders Policy and Procedure														Monitoring Visits Policy and Procedure Monitoring Follow-up Letter Responses Policy and	Procedure
Corrective Action	visit.	All Adverse Events are documented in the chart per GCP, GCS SOP, and protocol	All Serious Adverse Events are	communicated to sponsor and respective IRB within 24 hours of knowledge of event.	Formal report will follow with appropriate required documentation.	All research patient drug orders are pre-	printed prior to each scheduled patient	check and shipment of drug from central	pharmacy to the on-site pharmacy tech.	• On the day of treatment, the patient is	patient is eligible to receive drug, the drug	order is signed and dated by PI or sub-PI	and CRC providing the appropriate study	drug dosage per protocol (taking into	modification).	No drug is prepared by research pharmacy	without signed drug order.	The pharmacy technician will verify and document on the Research Source	Documentation Form that appropriate sign-	off for drug administration and dosage is in	place before releasing study drug for administration.	To ensure protocol compliance and quality control independent monitors from the	pharmaceutical sponsors perform routine audits.
Area for Improvement		Adverse Event Reporting				Drug accountability																External audit (Sponsor monitoring visits)	

Status Compliance Measure		Complete N/A	Complete N/A	Complete N/A
Timeline/ Documentation		Internal Audit Policy and Procedure C	Process Audit Policy and Procedure Comparison of the Procedure Comp	Audit occurred during the week of July 22, 2002. Audit documented compliance with newly introduced corrective action plan. PI provided formal response to audit review.
Corrective Action	 The PI, Research Nurse Manager, and the Research Data Outcomes Supervisor meet with the monitor for an exit interview following each visit. If the audit reveals areas of deficiency, the PI will respond to the audit report in writing with an outline of the corrective action. The IRB is copied on monitoring letters and GCS's response. Outcome of all monitoring visits is presented to research staff at weekly meetings for input and system-wide corrective action (if applicable) 	To ensure on-going protocol compliance and adherence to GCS Policies and Procedures, internal audits using a standard audit tool will be conducted by CRCs on a routine basis and findings reported at the weekly research meeting.	To ensure ongoing compliance with GCS SOPs, IRB reporting, monitor letter response, drug accountability, correct version of IC, meeting regularity and minutes taken, and initiation visit attendance, a quarterly audit of processes outlined in GCS SOPs will be conducted.	To ensure on-going protocol compliance and adherence to GCP an independent auditor from UAB will routinely audit a representative sample of our study patient charts. A formal audit report with recommendation is provided to the PI for response.
Area for Improvement		Internal audit	Process audit	GCS-UAB Network Audit

Status Compliance Measure	Complete N/A	Complete N/A
Timeline/ Documentation	Charts audited 8 /6 - 8 /20/2002. In follow up to the successful audit, we have instituted a graduated restart of our research program, with two research sites activated sequentially. Therefore, we have restarted patient accrual at our Northside research site as of Sept. 15, 2002 and re-activated 6 protocols with IRB approval. In October, our Stemmer research site underwent an audit and restarted based on a successful report. This site followed the same re-start plan as our Northside research site.	Research training session titled "CRC Level I Training Workshop" was held on 6/5/02. The workshop was conducted by Jane Green, President of the Walter B. Morley Research Foundation. 20 staff members attended IRB Training session titled "Human Subjects Protections Training" held on 7/29/02. The course is CME approved and was taught by Shelia Moore, Director of the UAB IRB. The ½ day session was attended by 12 physicians and 22 staff members. GCS physicians interested in becoming investigators must have either attended the training session on 7/29/02 or complete an approved on-line course. To date, four additional investigators have completed the online certification. Only those physicians who have received appropriate certification will be listed on the 1572 and permitted to participate in clinical research.
Corrective Action	 To ensure compliance with GCP, GCS SOP and protocol, an independent consultant was contracted to review a representative sample of patients from each of our research clinics. These findings formed an objective basis for the determination of readiness of our research clinics to return to patient accrual. 	 Basic clinical research and GCP training identified as a need for the staff. Investigator training regarding human subject protection was identified as a need for the physicians and staff. Annual research staff education retreat Orientation of new research staff
Area for Improvement	Independent Audit	Investigator and Staff Education

Attachment 2

A phase II study of SGN-15 (cBR96-doxorubicin immunoconjugate) combined with docetaxel for the treatment of metastatic breast carcinoma Year: 2003 Category: Antibodies Abstract No: 696 Author(s):L. L. Hart, L. Nabell, M. Saleh, S. Sundaram, A. Mauer, J. Marshall, D. McCune, A. S. Sandler, A. P. Sing, C. Siegall; Florida Cancer Specialists, Fort Myers, FL; University of Alabama, Birmingham; Georgia Cancer Specialists, Atlanta; Sharp HealthCare, San Diego; University of Chicago, Chicago; Lombardi Cancer Center, Washington D.C.; Madigan Army Medical Center, Tacoma; Seattle Genetics, Inc., Bothell Abstract: Prognosis of patients (pts) with metastatic breast carcinoma (BC) is poor with limited treatment options available. Consequently, there is a continued effort to develop new agents to improve the disease-free survival for these patients. SGN-15 is an antibody-drug conjugate (cBR96-Doxorubicin Immunoconjugate) that delivers doxorubicin to tumor tissues expressing the Lewis-y (Ley) antigen. Preclinical studies demonstrated significant enhancement of antitumor activity of SGN-15 when combined with a taxane agent. A phase II multicenter, open label study was conducted to evaluate the safety and efficacy of the combination of SGN-15 and docetaxel in the setting of metastatic BC. Patients received SGN-15 (175 mg/m²) and docetaxel (30 mg/m²) for 6 weekly infusions followed by a 2-week rest period (8-week course). Patients were evaluated for response after each treatment course and could receive a maximum of 6 courses. Eligibility criteria included documented metastatic BC, Ley antigen expression, no more than two prior therapies for metastatic disease, and a life expectancy greater than 3 months. Twenty-seven of 30 pts were evaluable for response

(received at least one full course). Patient characteristics of evaluable pts: median age: 54 years old (range: 35-78), gender: 26 female and 1 male, and liver metastases: 10 pts. Five (1 PR, 4 MR) pts had an objective response by WHO criteria. One of these pts had a 70% reduction in metastatic liver lesions after the first course of therapy. Nine pts achieved SD after their first course of therapy. Toxicity associated with the SGN-15/docetaxel regimen was readily managed with conventional anti-emetic/diarrheal therapies. The majority of the Grade 3 toxicities were GI-related and self-limiting. Conclusion: The combination of SGN-15 and docetaxel is well tolerated with objective responses observed in the metastatic BC setting.

Attachment 2

Phase 2 trial of ISIS 2503, an antisense inhibitor of h-ras, in combination with weekly paclitaxel in the treatment of patients with metastatic breast cancer.

Year: 2003

Category: Gene Therapy/Antisense Strategies

Abstract No: 829

Author(s):M. N. Saleh, D. Irwin, G. Burton, J. B. Hargis, C. Chitambar, C. M. Jones, C. L. Shapiro, J. T. Holmlund, F. A. Dorr; Georgia Cancer Specialists, Marietta, GA; Alta Bates Comprehensive Cancer Center, Berkeley, CA; Louisiana State University Health Sciences Center, Shreveport, LA; Kentuckiana Cancer Institute PLLC, Louisville, KY; Medical College of Wisconsin, Milwaukee, WI; C. Michael Jones, MD, PC, Germantown, TN; Arthur G. James Cancer Hospital and Richard J. Solove Research Institute, Columbus, OH; Isis Pharmaceuticals, Inc., Carlsbad, CA

Abstract: ISIS 2503 is a 20-base antisense drug that specifically inhibits expression of H-ras mRNA and protein. In the MMTV-H-ras transgenic mouse model, ISIS 2503 demonstrated more than additive antitumor activity in combination with paclitaxel (Petit et al, Proc AACR 40:20, 1999, #136). We conducted a phase II trial of weekly paclitaxel, 80 mg/m2, in combination with ISIS 2503 at the recommended Phase 2 single-agent dose (6 mg/kg/day by 14-day continuous IV infusion repeated every 21 days). Eligibility: measurable metastatic breast cancer, no prior chemotherapy for metastatic disease. Prior adjuvant therapy was permitted, including prior taxanes if tumor progression was more than 6 months later. Treatment was continued for 12 weeks, and could continue until disease progression if toxicity was acceptable. Intrapatient dose escalation of ISIS 2503 to 10 mg/kg/day, was permitted if toxicity permitted. Patients were assessed for response at 6-week intervals. Twenty-five female patients have been enrolled; PS 0/1/2, 11/12/1 (1 NA). Number of metastatic sites: 1 (12 pts), 2 (10 pts), 3(1 pt), (2 NA). Three patients had received adjuvant paclitaxel. Unaudited data show 123, 21-day treatment cycles administered (median 4, range 1-14). Six patients remain on treatment as of 12/12/02. Treatment has been well tolerated with no patient discontinuing treatment because of toxicity. Final dosing and treatment data are being collected. To date, response data are available for 17 patients: 8 PR (47%) and 4 SD (24%). This combination appears to have promising activity. Further data will be presented at the meeting.

Associated Presentation(s):

1. Phase 2 trial of ISIS 2503, an antisense inhibitor of h-ras, in combination with weekly paclitaxel in the treatment of patients with metastatic breast cancer.

Presenter: Mansoor Saleh (MD) Year: 2003

Session: Developmental Therapeutics - Molecular (Scientific

Program)